

2nd Workshop on Computational Advances in Molecular Epidemiology (CAME 2013)

in conjunction with

3rd IEEE International Conference on Computational Advances in Bio and Medical Sciences (ICCABS)
June 12-14, 2013, New Orleans, LA

Workshop Co-Chairs:

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The CAME workshop provides a forum for presentation and discussion of the latest computational research in molecular epidemiology. This multidisciplinary workshop will bring together field practitioners of molecular epidemiology, molecular evolutionists, population geneticists, medical researchers, bioinformaticians, statisticians and computer scientists interested in the latest developments in algorithms, mining, visualization, modeling, simulation and other methods of computational, statistical and mathematical analysis of genetic and molecular data in the epidemiological context.

Molecular epidemiology is essentially an integrative scientific discipline that considers molecular biological processes in specific epidemiological settings. It relates molecular biological events to etiology, distribution and prevention of disease in human populations. Over years, molecular epidemiology became extensively fused with mathematical and computational science and immensely benefitted from this tight association. The workshop will review the latest advancements in application of mathematical and computational approaches to molecular epidemiology.

Workshop topics of interest include but are not limited to:

- Analysis of mass spectrometry data
- Evaluation of viral quasispecies
- Phylogenetics of pathogens
- Computational support to disease surveillance
- Identification of pathogen transmission events
- Computational approaches to pathogen evolution
- Identification of novel markers of disease
- Population dynamics and drug-resistance
- Metagenomic analysis

This meeting is by invitation only. If you would like to inquire about the possibility of being invited, please contact the workshop chairs by May 10, 2013. One page abstracts of invited talks will be included in the ICCABS proceedings published in the IEEE Xplore Digital Library. Full length articles will be invited to a special issue of a major international journal following the workshop.

Workshop Registration Fees:

- IEEE Members: \$350
- IEEE Non-members and late registration (after May 20, 2013): \$450